

Work Order ID 75659

\*75659\*

Page 1

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Replacement Skidtube

Stop \*NS2\*

Start Date: 27/10/2011 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 11/10/12

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center-ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3274	D								
IIN-D206-642	Rev M								
100		0.00							
*100*	DOCUMENT CONTROL								
DC		0.00							
Document Control	Memo Photocopy bluefile & type labels per PPP D206-642-541				CHG003				

*NA*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 75659****\*75659\***

Page 2

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 27/10/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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110

0.00

**\*110\***

Skidtubes

0.00

Skidtubes

Memo

\*\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QSI004

AR Aluminum Rod Batch: m 120164

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.

Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

12-01-13  
12-02-15  
12-02-29

W/O: 75659

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D200-002-541 PAR #: \_\_\_\_\_ Fault Category: Seal tube NCR: Yes No DQA: date Date: 12/09/04  
 Resolution: Reinsert Disposition: Reinsert QA: N/C Closed: CK Date: 12/4/4

12-1301  
NCR:

## WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12.03.05	150	Fwd $\phi 0.375$ hole was drilled $\phi 0.375$ .	CP 12.03.05 05/04/2	Make custom D3275-1 x bolt spacer: 6061-T6 $\phi 0.375$ O.D. x $\phi 0.197$ I.D. x 3.180 LONG	SL 12/03/05 1119043-75 "long"	12/03/05	CP 12.03.05 05/04/2	12/03/05
			CP 12.03.05	Install custom D3275-1 x bolt spacer w/ $\phi 0.375$ O.D.	BE 12-03-13	12/03/05	CP 12.03.05	12/03/05

NOTE: Date &amp; initial all entries

**Work Order ID 75659****\*75659\***

Page 3

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 27/10/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
114 <b>*114*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		8/16/11					
116 <b>*116*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00 0.00		8/16/11					
120 <b>*120*</b> HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00							12-02-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75659

**\*75659\***

Page 4

October-27-11 2:43:48 PM

Item ID: D206-642-541 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube  
 Start Date: 27/10/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 07/11/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC3- Inspect Part Finish	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									
150		0.00							
<b>*150*</b>	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274								
	2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube								
	3-Bond web in place as per Dwg D3274 & QSI 015.								
	A/RSikaflex-291 <u>119559</u>								
	Sikaflex expire date: <u>12/08/13</u>								
	Start: <u>12/03/06</u> Time: <u>4:00</u>								
	Finish: <u>12/03/13</u> Time: <u>4:00</u>								
	(Adhere for 12 hours)								

*Handwritten notes:*  
 12/03/06  
 12/03/06  
 12/03/06

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-642-541 PAR #: \_\_\_\_\_ Fault Category: Landy gear/skid tube NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/2/29	150	employee opened up wrong hole b 0.875" instead of 0.3125 hole 24" hole from att. R.L. 10A when <del>was</del> drilled out hole size						S 12/2/29
								S 12/2/29

NOTE: Date & initial all entries



# Work Order ID 75659

**\*75659\***

Page 5

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 27/10/2011 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC5- Inspect part completeness to step on W/O

0.00

**\*160\***

QC

Memo

0.00

Quality Control

12-3-12  
as per PTO

170

Skidtubes

0.00

**\*170\***

Skidtubes

Memo

0.00

Skidtubes

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297" . Deburr

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBE  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

①

SAD 12-03-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*75659\***

October-27-11 2:43:48 PM

**\*N900040100\***

Setup. Start \*NS1\*

Stop \*NS2\*

Stop \*NS2\*

**\* 1 \***

**Cust Item ID:**

**\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

Stop **\*NP2\***

OC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NP2\***

### Operation Description

### Set Up/ Run Hours

**Tool ID**

**Tool #****Plan  
Code**

**Accept  
Qty**

Reject  
QtyReject  
Number

**Insp.**  
**Stamp**

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

OC

## Memo

0,00

## Quality Control

190

0.00

\*190\*

## Skidtubes

0.00

## Skidtubes

## Memo

## Skidtubes

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod  
A/RAluminum Rod *m/20/64* *RF 12/03/11*

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 75659****\*75659\***

Page 7

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 27/10/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	QC5- Inspect part completeness to step on W/O	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									
210	QC10- Inspect visual per QSI004- ground welds	0.00							
<b>*210*</b>									
QC	Memo	0.00							
Quality Control									
220	Pressure Wash per QSI005 4.3	0.00							
<b>*220*</b>									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch								

1X *[Signature]* 12/03/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*75659\***

October-27-11 2:43:48 PM

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Item Name:** Replacement Skidtube

**Start Date:** 27/10/2011    **Start Qty:** 1.00    **\*1\***

**Cust Item ID:**

**Required Date:** 07/11/2011      **Req'd Qty:** 1.00      **\* 1 \***

**Customer:**

**Reference:**

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

\*230\*

M120222

0.00

Powdercoat

## Memo

START TIME: 11:23  
OVEN TEMPERATURE: 370°  
FINISH TIME: 11:55

## Powder Coating

240

### QC3- Inspect Part Finish

0.00

**\*240\***

## Memo

0.00

OC

## Quality Control

250

## HandFinishing

0.00

**\*250\***

## Memo

0.00

HandFinish

## Hand Finishing

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.  
A/RN/ALPS-3

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a  
A/RSikaflex-291 W H G G G G  
Sikaflex expire date:

12/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 75659

**\*75659\***

Page 9

October-27-11 2:43:48 PM

Item ID: D206-642-541 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube  
 Start Date: 27/10/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 07/11/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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260	QC5- Inspect part completeness to step on W/O	0.00							
<b>*260*</b>									
QC	Memo	0.00							
Quality Control	Inspect Nut Plate & Inserts								

270	HAND FINISHING RESOURCE #1	0.00							
<b>*270*</b>									
HandFinish	Memo	0.00							
Hand Finishing	1-Install wearpads & gaskets as per Dwg D3274.								

2-Install ring as per Dwg D3274  
 A/RSikaflex-291 M1199999  
 Sikaflex expire date: 12/08  
 3-Inspect for foreign objects as per QSI 024  
 4-Spray inside of tube on both sides of web with LPS-3  
 A/R LPS-3 Batch: W/A  
 5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.  
 A/RSikaflex-291 M1199999  
 Sikaflex expire date: 12/08

1 OK 12-3-21

1X Ø M-L 12/03/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval. QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75659

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Page 10

October-27-11 2:43:48 PM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 27/10/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/11/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC5- Inspect part completeness to step on W/O	0.00							
<b>*280*</b>									
QC	Memo	0.00							
Quality Control									
290	Identify as per dwg & Stock Location: _____	0.00							
<b>*290*</b>									
Packaging	Memo	0.00							
Packaging									
300	QC21- Final Inspection - Work Order Release	0.00							
<b>*300*</b>									
QC	Memo	0.00							
Quality Control									

1 BR 123-21

PP 79014

23/28/29

12/13/29

mf  
12-03-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 1

October-27-11 2:43:52 PM

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

## Comments:

IPP Rev:B05.09.23 Revised per D206-642 Rev. JKJ/JLM  
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC  
 IPP Rev:F 08-06-02 add comment DD verified by:EC  
 IPP Rev:G 08-10-09 revise details DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-1-190 <b>*D2600-1-190*</b> Extrusion Round 3" 206		Manufactured	No			110	Each	55.0000	1	1			
76912 ** ET 12-01-13													
						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
						HALL	55						
						69622	55						
D3285-1 <b>*D3285-1*</b> Cap		Manufactured	No			110	Each	74.0000	1	1			
** BE 12-02-22													
						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
						LG002	74						
						52511	27						
						52647	47						
D3282-041 <b>*D3282-041*</b> Float Web (206L/407)		Manufactured	No			150	Each	1.0000	1	1			
** BB/AG 12-3-6													
						<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
						LG	1						
						70050	1						

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval. QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

October-27-11 2:43:52 PM

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

190

Each

937.0000

12

12

**\*D2649\***

Cross Bolt Spacer

\*\*

*BE 12/03/13*  
*B 7565 012*

Location

Loc Qty

Loc Code

LG

617

68224

2

71355

2

72704

2

72841

11

73855

600

LG001

320

65317

1

68507

11

73390

8

73857

21

73860

279

D3275-1

Manufactured No

190

Each

324.0000

12

12

**\*D3275-1\***

Crossbolt Spacer

\*\*

*BE 12/03/13*

Location

Loc Qty

Loc Code

LG

100

74437

100

LG002

224

66930

106

73393

118

October-27-11 2:43:53 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

October-27-11 2:43:53 PM

Page 3

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

250

Each

1,984.000

2

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

M/L 12/03/21

Location

Loc Qty

Loc Code

FP-B

2

110139

2

ST311

1982

114859 ✓

982

119017

1000

2

D3415-041

Manufactured

No

250

Each

32.0000

1

1

**\*D3415-041\***

Nut Plate

\*\*

M/L 12/03/21

Location

Loc Qty

Loc Code

ST053

32

67605 ✓

32

1

CCR264SS3-3

Purchased

No

250

Each

1,259.000

2

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

M/L 12/03/21

Location

Loc Qty

Loc Code

FP-B

2

113973

2

ST311

257

117849 ✓

257

ST317

1000

119017

1000

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 4

October-27-11 2:43:53 PM

Work Order ID: 75659

\*75659\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

250

Each

2,279.000

78

78

\*AI S4-1032-130\*

Insert

120181

\*\*

78 M/L 12/03/21  
X

## Location

## Loc Qty

## Loc Code

ST280

2000

119084

2000

ST281

279

117717

2

118237

12

118312

2

118386

263

D3536-15

Manufactured

No

270

Each

30.0000

1

1

\*D3536-15\*

Gasket

80333

\*\*

1 M/L 12/03/21

## Location

## Loc Qty

## Loc Code

FP002

26

73318

26

FP011

4

71586

4

D3536-23

Manufactured

No

270

Each

38.0000

1

1

\*D3536-23\*

Gasket

\*\*

M/L 12/03/21

## Location

## Loc Qty

## Loc Code

FP

12

74510 ✓

12

FP002

25

73312

25

FP011

1

43406

1

October-27-11 2:43:53 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Page 5

October-27-11 2:43:53 PM

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured No

270

Each

43.0000

1

1

**\*D3536-35\***

Gasket

80335

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP002	37	
73313	19	
74511	18	
FP012	6	
72882	6	

D3536-39

Manufactured No

270

Each

28.0000

1

1

**\*D3536-39\***

Gasket

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP002	26	
73317 ✓	26	
FP015	2	
69760	2	

D3535-15

Manufactured No

270

Each

16.0000

1

1

**\*D3535-15\***

Wearshoe

\*\*

74512 M-L 12/03/21

Location	Loc Qty	Loc Code
FP007	16	
73006	3	
73315	13	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

October-27-11 2:43:53 PM

Work Order ID: 75659

\*75659\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured No

270 Each 18.0000 1 1

\*D3535-35\*

Wearshoe

80332

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP018	18	
67598	1	
70815	1	
73311	16	

D3535-39

Manufactured No

270 Each 21.0000 1 1

\*D3535-39\*

Wearshoe

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP018	21	
69759	1	
73316	20	

D3535-23

Manufactured No

270 Each 26.0000 1 1

\*D3535-23\*

Wearshoe

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP021	26	
73314	26	

D3537-3

Manufactured No

270 Each 17.0000 1 1

\*D3537-3\*

Wearpad

\*\*

M-L 12/03/21

Location	Loc Qty	Loc Code
FP002	14	
73305	14	
FP017	3	
35697	1	
72144	2	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

Page 7

October-27-11 2:43:53 PM

Work Order ID: 75659

\*75659\*

Parent Item: D206-642-541

\*D206-642-541\*

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3537-1 Manufactured No

270 Each 43.0000 9 9

\*D3537-1\*

Wearpad

79833

\*\*

9 m-l 12/03/21

Location

Loc Qty

Loc Code

FP002

36

74597

36

FP017

7

69817

5

70686

2

AN960C10L NAS1149C0332 Purchased No

270 Each 0.0000 80 80

\*AN960C10I \*

washer

120648

\*\*

80 m-l 12/03/21

AN960C416 NAS1149C0463 Purchased No

270 Each 0.0000 1 1

\*AN960C416\*

washer

117735

\*\*

1 m-l 12/03/21

D3672-1 Manufactured No

270 Each 804.0000 2 2

\*D3672-1\*

Phenolic Washer

\*\*

m-l 12/03/21

Location

Loc Qty

Loc Code

FP-A

444

52505

0

66821

444

ST074

360

72229

360

2

October-27-11 2:43:53 PM

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

October-27-11 2:43:53 PM

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

2,531.000

80

80

**\*AN3C4A\***

BOLT

120769

\*\*

80 m/l 12/03/21

Location

Loc Qty

Loc Code

ST350

2531

117313

2

117688

5

117872

22

118112

16

118451

2

118706

500

118838

984

119328

1000

AN4C5A

Purchased

No

270

Each

529.0000

1

1

**\*AN4C5A\***

BOLT

\*\*

m/l 12/03/21

Location

Loc Qty

Loc Code

FP-B

54

112243 ✓

54

ST345

2

112243

2

ST355

473

112243

373

119017

100

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Page 9

October-27-11 2:43:53 PM

Work Order ID: 75659

**\*75659\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 1.00

Required Qty: 1.00

D2646

Manufactured No

270

Each

83.0000

1

1

**\*D2646\***

Aft Cap

\*\*

Location

Loc Qty

Loc Code

FP002

60

73294

60

FP004

11

68280

11

FP006

5

62678

5

FP-4

3

70945

1

71070

2

fp5

4

71038

4

D3413-1

Manufactured No

270

Each

46.0000

1

1

**\*D3413-1\***

Ring

Location

Loc Qty

Loc Code

ST368

41

73821

41

ST420

2

66387

1

70773

1

ST467

1

73298

1

ST473

2

71041

2

October-27-11 2:43:53 PM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <b>CP</b>	DRAWN BY <b>PH</b>	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
CHECKED <b>H</b>	APPROVED <b>H</b>	DRAWING NO. <b>D3274</b>	REV. D SHEET 1 OF 4
DATE <b>06.12.19</b>		TITLE <b>SKIDTUBE ASSEMBLY</b> SCALE NTS	
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

**RELEASED**07.02.12 **H****DEO ATTACHED**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

**GENERAL NOTES:**

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 75659

M.L.U

11/10/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

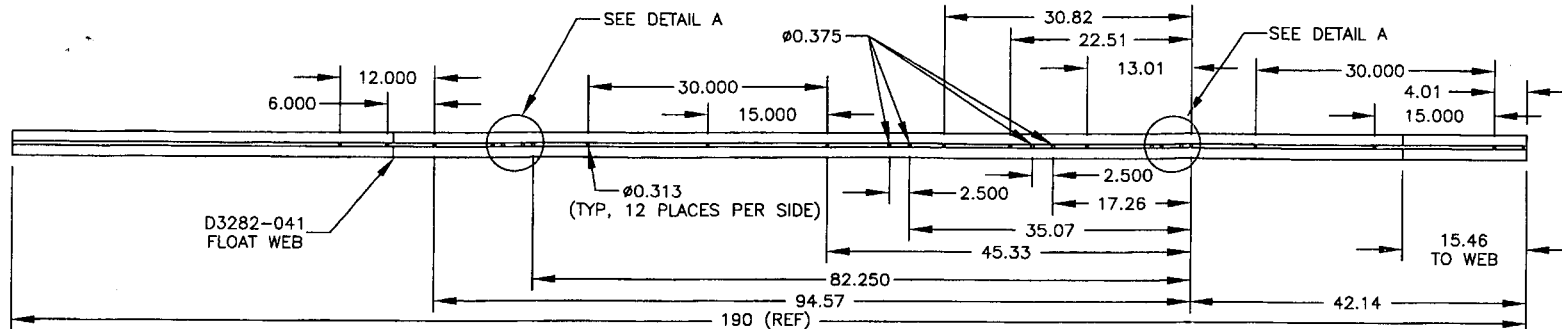
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

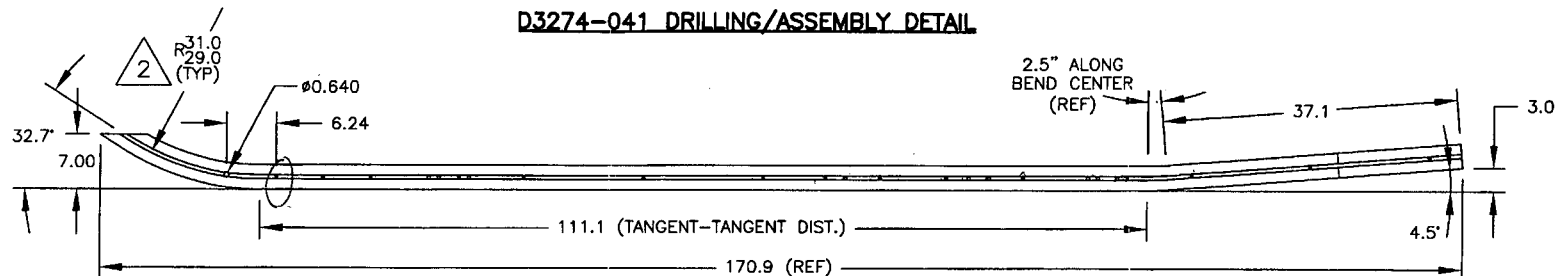


75659

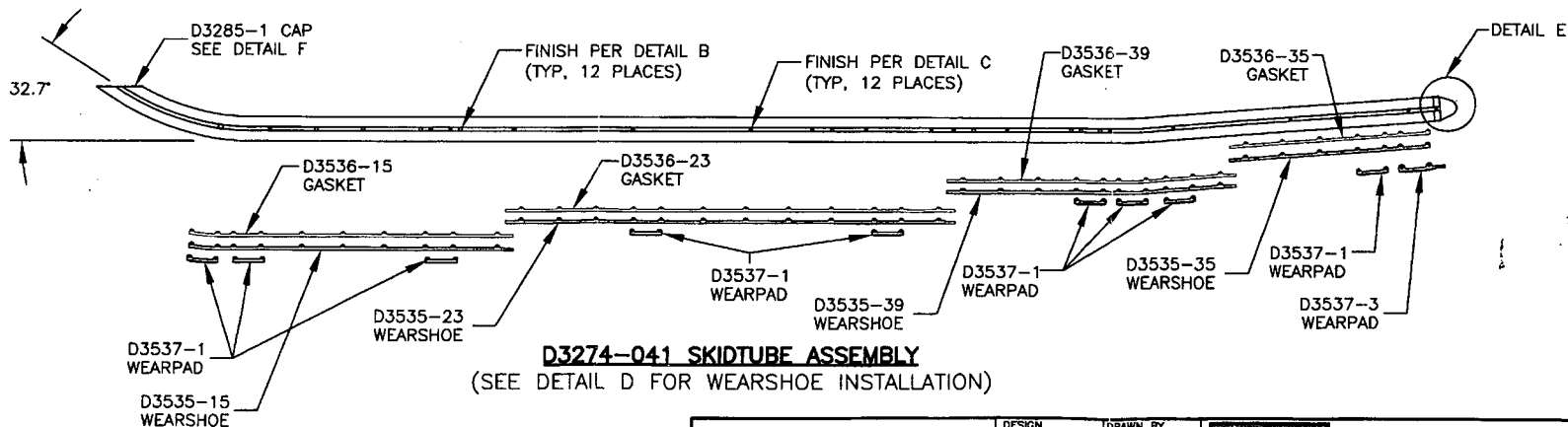
DEO ATTACHED



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

COPYRIGHT © 2004 BY DART AEROSPACE USA, INC.		DESIGN	CP	DRAWN BY	PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. D
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED	#	APPROVED	#		DRAWING NO. D3274
		DATE	06.12.19	TITLE		SKIDTUBE ASSEMBLY	SCALE 1:15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

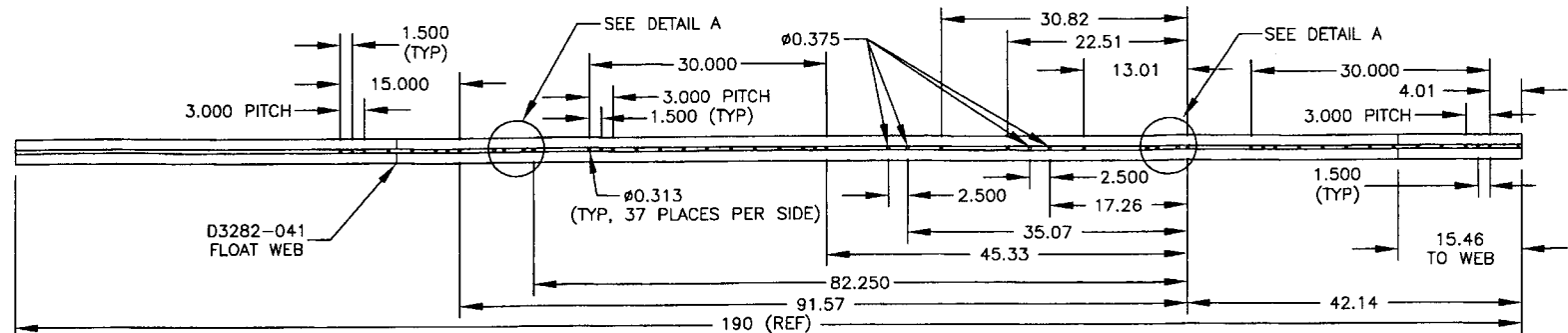
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

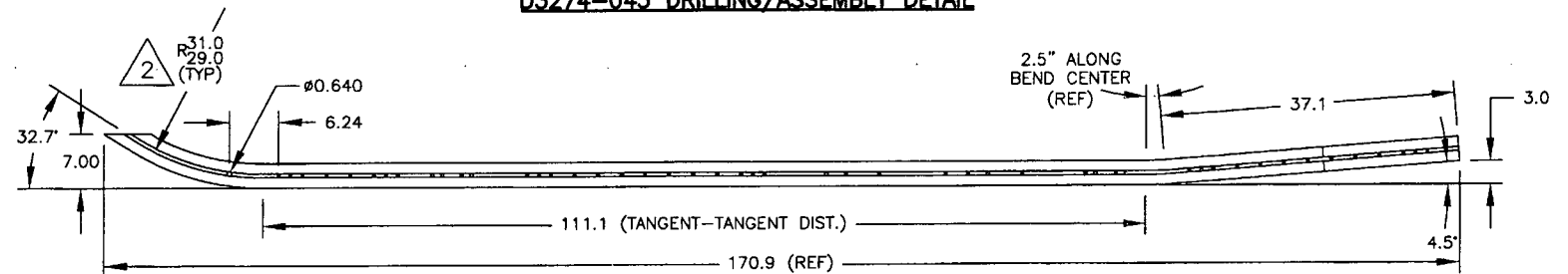
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

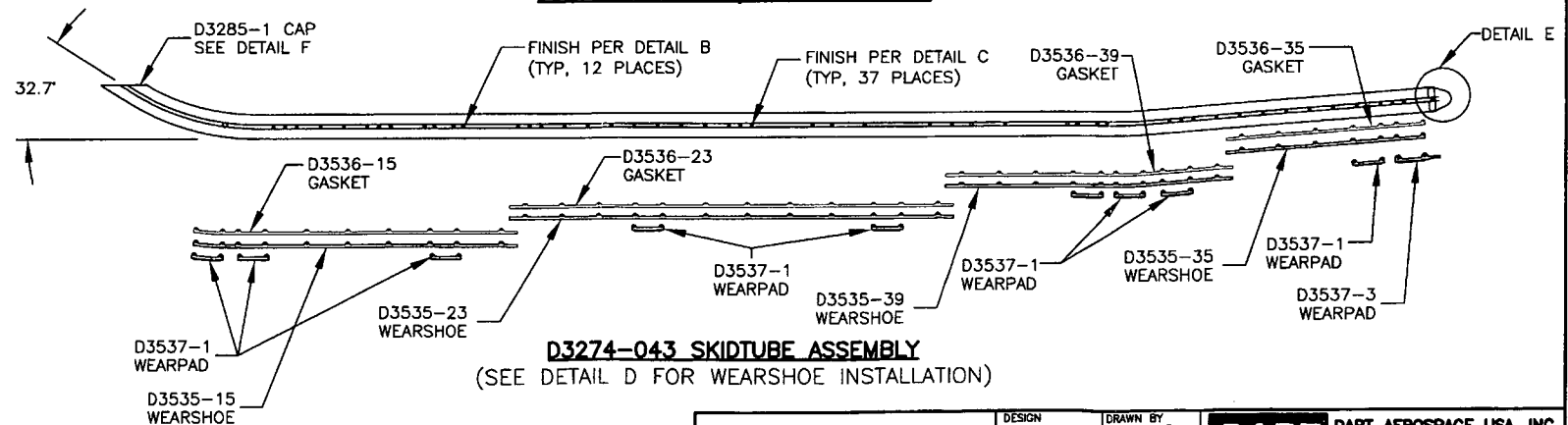
DEO ATTACHED



**D3274-043 DRILLING/ASSEMBLY DETAIL**



**D3274-043 BEND/DRILLING DETAIL**



**D3274-043 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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DESIGN	CP	DRAWN BY	PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	#	APPROVED	#	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D SHEET 3 OF 4 SCALE 1:15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

75659

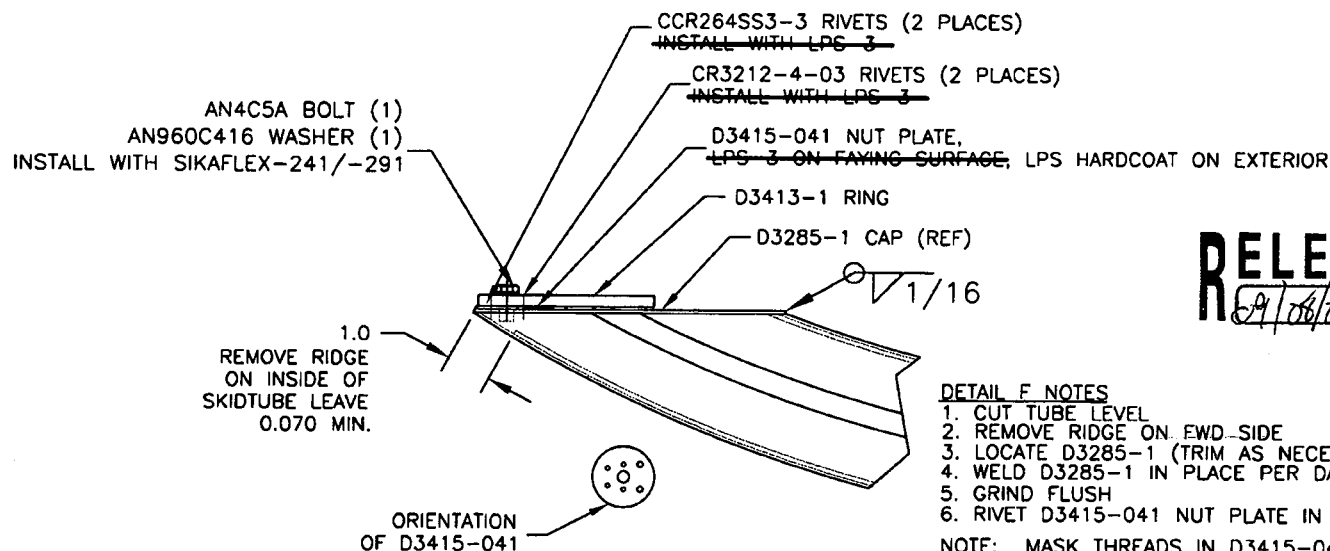
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>1</i>	MFG. APPR. <i>1</i>	APPROVED <i>WAP</i>	DE APPR. <i>1</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23		

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: ~~"SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS-3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON EWD-SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

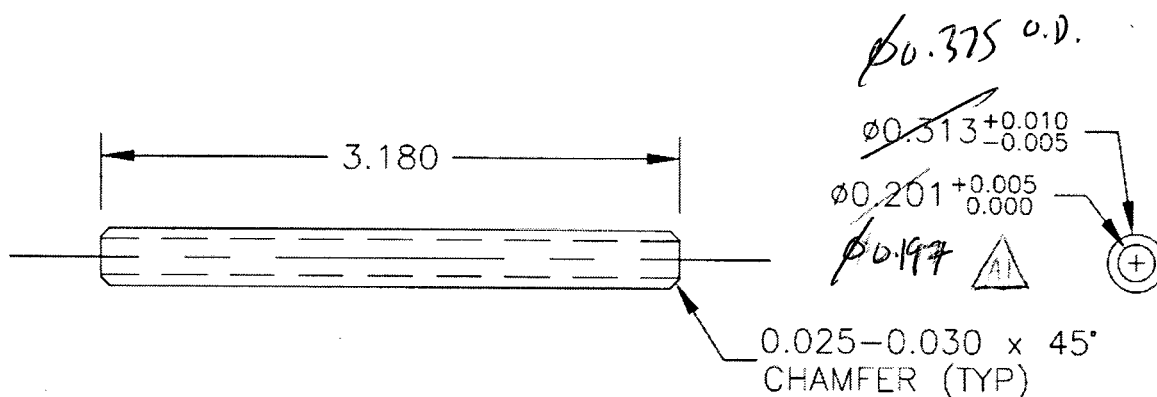
**NOTE:** Date & initial all entries



DESIGN <i>JP</i>	DRAWN BY <i>JP</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>JP</i>	APPROVED <i>JP</i>	DRAWING NO. D3275	REV. A SHEET 1 OF 1
DATE 04.03.10		TITLE CROSS BOLT SPACER	SCALE 1:1
A	04.03.10	NEW ISSUE	

RELEASED  
04.06.22

### REFERENCE ONLY



### D3275-1 CROSS BOLT SPACER

- 1) MATERIAL: 6061-T6 (QQ-A-200/8 OR QQ-A-225/8)  
(REF DART SPEC. M6061T6R) *M6061T6T3 313W.058*
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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## Chris Provencal

---

**From:** David Shepherd <dshepherd@dartaero.com>  
**Sent:** Monday, March 05, 2012 9:45 AM  
**To:** 'Chris Provencal'  
**Cc:** 'Mike Petsche'  
**Subject:** RE: NCR D3274-041

As discussed, this is an acceptable deviation.

David

---

**From:** Chris Provencal [<mailto:cprovencal@dartaero.com>]  
**Sent:** February-29-12 1:41 PM  
**To:** David Shepherd  
**Cc:** Mike Petsche  
**Subject:** NCR D3274-041

QTY (1) D3274-041 (D206-642-541)

They opened the fwd-most float hole to 0.375" instead of 0.313". The D3275-1 crossbolt spacer is now too small (0.313 OD x 0.197 ID), so we'd like to install a custom 0.375 OD x 0.197 ID crossbolt spacer . Is this acceptable?

-Chris

NO. 285

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 79322  
Part number: A206-642-541  
Description: Skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier David Hunt Date of Test Coupon 12.03.14  
Welder Barclay Elliott Date of Test Coupon 12.03.14

The above named individual is qualified in accordance with AWS D17.1.2001 to weld